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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
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2000 M STREET NW SUITE 700 WASHINGTON, DC 20036-3307			OSORIO, RICARDO		
			ART UNIT	PAPER NUMBER	
			2673	1	
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Please find below and/or attached an Office communication concerning this application or proceeding.

· ·	Application No.	Applicant(s)				
	09/986,623	KAYE ET AL.				
Office Action Summary	Examiner	Art Unit				
	RICARDO L OSORIO	2673				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPI THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statu - Any reply received by the Office later than three months after the maili earned patent term adjustment. See 37 CFR 1.704(b). Status	136(a). In no event, however, may ply within the statutory minimum of d will apply and will expire SIX (6) Note, cause the application to become	y a reply be timely filed thirty (30) days will be considered timely. MONTHS from the mailing date of this commuse ABANDONED (35 U.S.C. § 133).	unication.			
1) Responsive to communication(s) filed on <u>09</u>	November 2001 .					
2a) ☐ This action is FINAL . 2b) ☑ T	his action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-22 is/are pending in the application						
4a) Of the above claim(s) is/are withdra 5) Claim(s) is/are allowed.	awn from consideration.					
6)⊠ Claim(s) <u>1-22</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/	or election requirement					
Application Papers						
9)☐ The specification is objected to by the Examin	ier.					
10)☐ The drawing(s) filed on is/are: a)☐ acc	epted or b) objected to b	by the Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the E	:xaminer.					
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign	gn priority under 35 U.S.	C. § 119(a)-(d) or (f).				
a) ☐ All b) ☐ Some * c) ☐ None of:						
<u> </u>	1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documer						
3. Copies of the certified copies of the pri application from the International E* See the attached detailed Office action for a list	Bureau (PCT Rule 17.2(a)).	ge			
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)	· •					
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 	5) Notice	iew Summary (PTO-413) Paper No(s)e of Informal Patent Application (PTO-15				

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DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 2, 7, 8, 13, 14, 15, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawai (5,818,616) in view of Henderson (5,897,648).

Regarding claim 1, Kawai teaches of a collaborative input system (col. 3, lines 29-37) comprising: a host computer (TV conference system central device, Fig. 1, reference character 506), a display associated with the host computer (col. 3, lines 6-8 and 14-15. Although Kawai teaches a built-in monitor (in Fig. 4, reference character 609) in the TV conference system central device (Fig. 1, reference character 506) being also a display associated with the host computer, Kawai is silent as to this built-in monitor displaying the same information that is being diplayed, or mapped, on the digitizer. For the purpose of this rejection, as will be seen later, the projector large screen, col. 3, lines 14-15, is considered the display associated with the host computer), the host computer being constructed and arranged to execute an application to provide an image on the display (col. 3, lines 32-35 and col. 5, line 63-col. 6, line 6), at least one digitizer provided separate from the host computer (Fig. 8, reference character 101), the digitizer having an input surface defining a display space that is mapped to coincide with the display (col. 3, lines 25-28), and a pen structure (Fig. 3, reference character 544) operatively associated with the input surface (Fig. 8, reference character 101) such that proximity of the pen structure with

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respect to the input surface, as a result of a user's input, is detected by the digitizer (col. 3, lines 62-63), and a wireless communication link between the host computer and the digitizer (col. 3, lines 53-58) such that a user's input can be transmitted from the digitizer (Fig. 3, reference character 541), be received by the host computer (Fig 2, reference character 515), and be represented graphically on the display together with the image in real time (col. 3, lines 25-37 and 58-62, and col. 6, lines 3-6), thereby permitting a user associated with the digitizer to personally provide input to the host computer displaying the image (col. 3, lines 25-37 and 58-62, and col. 6, lines 3-6).

However, Kawai fails to teach that the digitizer is an electromagnetic digitizer.

Henderson teaches of an electromagnetic digitizer (col. 2, lines 5-6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use an electromagnetic digitizer, as taught by Henderson, in the device of Kawai because electromagnetic digitizers are well known in the art of digitizers to be used as one type of digitizer among many other alternatives, for example, electrostatic, touch, optical, ultrasonic, etc. (see Henderson, col. 1, line 66-col. 2, line 8).

Regarding claim 2, Kawai teaches of a plurality of electromagnetic digitizers being provided separate from the host computer and separate from each other (Fig. 1, reference characters 507-510, Fig. 3, reference character 543, and Fig. 8, reference character 101).

Regarding claim 7, Kawai fails to teach of the input surface being an opaque writing surface.

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Henderson teaches of a digitizer having an opaque surface (col. 4, lines 45-46).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the opaque writing surface, as taught by Henderson, in the device Kawai because digitizers with opaque writing surfaces are well known in the art of digitizers to be used for such tasks as control commands, data input, etc, while the transparent, or display digitizer is used for editing the data already entered. Also, opaque digitizers have a remote display, instead of being on top of the display, such as in the case of the transparent, or display digitizer, and this makes it generally less expensive than the transparent, or display digitizer.

Regarding claim 8, Kawai teaches of a collaborative input system (col. 3, lines 29-37) comprising: a host computer (TV conference system central device, Fig. 1, reference character 506), means for displaying an image, associated with the host computer (col. 3, lines 6-8 and 14-15. Although Kawai teaches a built-in monitor (Fig. 4, reference character 609) in the TV conference system central device (Fig. 1, reference character 506) being also a display associated with the host computer, Kawai is silent as to this built-in monitor displaying the same information that is being diplayed, or mapped, on the digitizer. For the purpose of this rejection, as will be seen later, the projector large screen, col. 3, lines 14-15, is considered the display associated with the host computer), the host computer being constructed and arranged to execute an application to provide an image on the display means (col. 3, lines 32-35 and col. 5, line 63-col. 6, line 6), digitizing means being separate from the host computer (Fig. 8, reference character 101), the digitizing means having an input surface defining a display space that is mapped to coincide with the display means (col. 3, lines 25-28), and a pen structure (Fig. 3,

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reference character 544) operatively associated with the input surface (Fig. 8, reference character 101) such that proximity of the pen structure with respect to the input surface, as a result of a user's input, is detected by the digitizing means (col. 3, lines 62-63), and means for communicating between the host computer and the digitizing means (col. 3, lines 53-58) such that a user's input can be transmitted from the digitizing means (Fig. 3, reference character 541), be received by the host computer (Fig. 2, reference character 515), and be represented graphically on the displaying means together with the image in real time (col. 3, lines 25-37 and 58-62, and col. 6, lines 3-6), thereby permitting a user associated with the digitizing means to personally provide input to the host computer displaying the image (col. 3, lines 25-37 and 58-62, and col. 6, lines 3-6).

However, Kawai fails to teach that the digitizing means is an electromagnetic digitizing means. Henderson teaches of an electromagnetic digitizing means (col. 2, lines 5-6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use an electromagnetic digitizer, as taught by Henderson, in the device of Kawai because electromagnetic digitizers are well known in the art of digitizers to be used as one type of digitizer among many other alternatives, for example, electrostatic, touch, optical, ultrasonic, etc. (see Henderson, col. 1, line 66-col. 2, line 8).

Regarding claim 13, which is dependent on claim 8, and comprises the claimed elements of claim 7, and is rejected on the same basis as set forth in claim 7.

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Regarding claim 14, Kawai teaches of a collaborative input system (col. 3, lines 29-37) comprising: a host computer (TV conference system central device, Fig. 1, reference character 506), a display associated with the host computer (col. 3, lines 6-8 and 14-15. Although Kawai teaches a built-in monitor (Fig. 4, reference character 609) in the TV conference room central device (Fig. 1, reference character 506) being also a display associated with the host computer. Kawai is silent as to this built-in monitor displaying the same information that is being diplayed, or mapped, on the digitizer. For the purpose of this rejection, as will be seen later, the projector large screen, col. 3, lines 14-15, is considered the display associated with the host computer), at least one digitizer provided separate from the host computer (Fig. 8, reference character 101), the digitizer having an input surface defining a display space that is mapped to coincide with the display (col. 3, lines 25-28), and a pen structure (Fig. 3, reference character 544) operatively associated with the input surface (Fig. 8, reference character 101) such that proximity of the pen structure with respect to the input surface, as a result of a user's input, is detected by the digitizer (col. 3, lines 62-63), and a wireless communication link between the host computer and the digitizer (col. 3, lines 53-58) such that a user's input can be transmitted from the digitizer (Fig. 3. reference character 541), be received by the host computer (Fig. 2, reference character 515), and be represented graphically on the display in real time (col. 3, lines 25-37 and 58-62, and col. 6, lines 3-6).

However, Kawai fails to teach that the digitizer is an electromagnetic digitizer.

Henderson teaches of an electromagnetic digitizer (col. 2, lines 5-6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use an electromagnetic digitizer, as taught by Henderson, in the device of Kawai

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because electromagnetic digitizers are well known in the art of digitizers to be used as one type of digitizer among many other alternatives, for example, electrostatic, touch, optical, ultrasonic, etc. (see Henderson, col. 1, line 66-col. 2, line 8).

Regarding claim 15, Kawai teaches of a plurality of electromagnetic digitizers being provided separate from the host computer and separate from each other (Fig. 1, reference characters 507-510, Fig. 3, reference character 543, and Fig. 8, reference character 101).

Regarding claim 20, which is dependent on claim 14, and comprises the claimed elements of claim 7, and is rejected on the same basis as set forth in claim 7.

Regarding claim 21, Kawai teaches of a method of providing input to a host computer (TV conference system central device, Fig. 1, reference character 506, and col. 3, lines 29-37) having a display associated therewith (col. 3, lines 6-8 and 14-15. Although Kawai teaches a built-in monitor (Fig. 4, reference character 609) in the TV conference room central device (Fig. 1, reference character 506) being also a display associated with the host computer, Kawai is silent as to this built-in monitor displaying the same information that is being diplayed, or mapped, on the digitizer. For the purpose of this rejection, as will be seen later, the projector large screen, col. 3, lines 14-15, is considered the display associated with the host computer), the host computer being configured to execute an application to provide an image on the display (col. 3, lines 32-35 and col. 5, line 63-col. 6, line 6), the method including:

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providing at least one digitizer provided separate from the host computer (Fig. 8, reference character 101), the digitizer having an input surface defining a display space (col. 3, lines 25-28), and a pen structure (Fig. 3, reference character 544) operatively associated with the input surface (Fig. 8, reference character 101) such that proximity of the pen structure with respect to the input surface, as a result of a user's input, is detected by the digitizer (col. 3, lines 62-63), mapping the display space to coincide with the display (col. 3, lines 25-28), providing a wireless communication link between the host computer and the digitizer (col. 3, lines 53-58) such that a user's input can be transmitted from the digitizer (Fig. 3, reference character 541), be received by the host computer (Fig. 2, reference character 515), and be represented graphically on the display together with the image in real time (col. 3, lines 25-37and 58-62, and col. 6, lines 3-6), thereby permitting the users associated with the digitizer to personally provide input to the host computer displaying the image (col. 3, lines 25-37 and 58-62, and col. 6, lines 3-6).

However, Kawai fails to teach that the digitizer is an electromagnetic digitizer.

Henderson teaches of an electromagnetic digitizer (col. 2, lines 5-6).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use an electromagnetic digitizer, as taught by Henderson, in the device of Kawai because electromagnetic digitizers are well known in the art of digitizers to be used as one type of digitizer among many other alternatives, for example, electrostatic, touch, optical, ultrasonic, etc. (see Henderson, col. 1, line 66-col. 2, line 8).

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3. Claims 3, 9, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawai in view of Henderson as applied to claims 1, 2, 7, 8, 13, 14, 15, 20 and 21 above, and further in view of Nishitani et al (5,629,714).

Regarding claim 3, Kawai teaches of the communication link including a transceiver at the digitizer (Fig. 3, reference characters 541 and 542) and a transceiver associated with the host computer (Fig. 2, reference character 515).

However, Kawai, as anticipated by Henderson, fails to teach that the transceivers are radio frequency transceivers.

Nishitani teaches that the communication links may utilize radio frequency (col. 5, lines 34-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize radio frequency, as taught by Nishitani, in the combined device of Kawai and Henderson because it is widely known in the art of wireless communications to either use radio or infrared.

Regarding claim 9, Kawai teaches that the means of communication includes a transceiver at the digitizer (Fig. 3, reference characters 541 and 542) and a transceiver associated with the host computer (Fig. 2, reference character 515).

However, Kawai, as anticipated by Henderson, fails to teach that the transceivers are radio frequency transceivers.

Nishitani teaches the communication links may utilize radio frequency (col. 5, lines 34-35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize radio frequency, as taught by Nishitani, in the combined device of Kawai

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and Henderson because it is widely known in the art of wireless communications to either use radio or infrared.

Regarding claim 16, Kawai teaches of the communication link including a transceiver at the digitizer (Fig. 3, reference characters 541 and 542) and a transceiver associated with the host computer (Fig. 2, reference character 515).

However, Kawai, as anticipated by Henderson, fails to teach that the transceivers are radio frequency transceivers.

Nishitani teaches the communication links may utilize radio frequency (col. 5, lines 34-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize radio frequency, as taught by Nishitani, in the combined device of Kawai and Henderson because it is widely known in the art of wireless communications to either use radio or infrared.

4. Claims 4, 10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawai in view of Henderson as applied to claims 1, 2, 7, 8, 13, 14, 15, 20 and 21 above, and further in view of Ieperen (6,320,597).

Regarding claim 4, as previously mentioned in reference to claim 1, Kawai teaches a monitor (in Fig. 4, reference character 609), built in the conference system central device (Figs. 1 and 4, reference character 506). However, Kawai is silent as to whether this built in monitor displays the same image as the digitizer. The display regarded as displaying the same image as the digitizer is a screen that is part of a projector (col. 3, lines 14-15 and 26-28).

Kawai, as anticipated by Henderson, fails to further teach of a digital whiteboard upon which the display is projected.

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Ieperen teaches of a smart, electronic or digital whiteboard (col. 3, lines 62-63) wherein the image reflecting the writing, or erasing performed on the touch sensitive panel (Fig. 1, reference character 14) of the electronic whiteboard, is displayed on a monitor of the personal computer (Fig. 1, reference character 26), and this image presented on the monitor of the personal computer is projected onto the touch sensitive screen (col. 1, lines 48-54 and col. 4, lines 8-15). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further have the digital whiteboard upon which the display image is projected, as taught by Ieperen, in the combined device of Kawai and Henderson because by substituting the set of built in display and projector display screen of Kawai by the set of computer display and digital whiteboard upon which the display image is projected of Ieperen, much more flexibility and interaction is achieved during the conference because the person in front of the room has the option of watching the conference material at the monitor of the personal computer without having to be standing up in front of, or looking over his shoulder, to the electronic board all the time, and not only the person giving the lecture, but any other persons in the audience can participate by walking to the digital whiteboard to make annotations. Also, it is well known in the art of projectors to alternately have the screen image, that is presented on the monitor of the computer, being projected onto the touch sensitive panel, or the touch sensitive panel being placed in front of a rear projection system, or the projector and touch sensitive panel being integrated into a single unit, since the same result can be obtained.

Regarding claim 10, which is dependent on claim 8, and comprises the claimed elements of claim 4, and is rejected on the same basis as set forth in claim 4.

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Regarding claim 17, which is dependent on claim 14, and comprises the claimed elements of claim 4, and is rejected on the same basis as set forth in claim 4.

5. Claims 5, 11 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawai in view of Henderson, as applied to claims 1, 2, 7, 8, 13, 14, 15, 20 and 21 above, and further in view of Lin (5,434,372).

Regarding claim 5, Kawai, as anticipated by Henderson, fails to teach of the pen structure being constructed and arranged to communicate with the input surface in a wireless manner.

Lin teaches of a pen structure (Fig. 1, reference character 13) being constructed and arranged to communicate with the input surface in a wireless manner (col. 1, lines 9-11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the wireless pen, as taught by Lin, in the combined device of Kawai and Henderson because electromagnetic tablets together with wireless pens, or position pointers, have been known to be an effective input device to a computer system (see Lin, col. 1, lines 9-11).

Regarding claim 11, which is dependent on claim 8, and comprises the claimed elements of claim 5, and is rejected on the same basis as set forth in claim 5.

Regarding claim 18, which is dependent on claim 14, and comprises the claimed elements of claim 5, and is rejected on the same basis as set forth in claim 5.

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6. Claims 6, 12, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawai in view of Henderson as applied to claims 1, 2, 7, 8, 13, 14, 15, 20 and 21 above, and further in view of Bi et al (6,262,719).

Regarding claim 6, the device of Kawai, as anticipated by Henderson, fails to teach of the pen structure being constructed and arranged to control mouse functions of the host computer.

Bi teaches of a pen structure being constructed and arranged to control mouse functions of the host computer (col. 3, lines 54-61).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to control mouse functions with the pen, as taught by Bi, in the combined device of Kawai and Henderson in order to be compatible with various program applications available in the market that may not be useful with standard pen based systems (see Bi, col. 2, lines 5-8 and 21-27). Also, cursor control can be achieved, in addition to writing, giving more flexibility and convenience.

Regarding claim 12, which is dependent on claim 8, and comprises the claimed elements of claim 6, and is rejected on the same basis as set forth in claim 6.

Regarding claim 19, which is dependent on claim 14, and comprises the claimed elements of claim 6, and is rejected on the same basis as set forth in claim 6.

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7. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshioka (5,027,198) in view of Henderson (5,897,648).

Regarding claim 22, Yoshioka teaches of a method of capturing presentation information at a host computer (col. 2, line 63-col. 4, line 33), the host computer (Fig. 2, reference character 12) having a display associated therewith (Fig. 2, reference character 1) and being configured to execute an application to provide an image on the display (col. 4, lines 7-11), the method including: capturing a current image on the display (col. 3, lines 64-67. Note that the same images displayed on the LCD 36 can also be displayed on large display unit 1), making the captured image a background image (col. 4, lines 5-15 and 26-35. Note that by adding, or writing, figures, or sentences, on the digitizer which is superimposed over the LCD having the original image, makes the original, or captured, image a background image), capturing annotation associated with the background image (col. 4, lines 5-12) made remotely from the host computer (col. 2, line 63-col. 3, line 8) via a digitizer (Fig. 3, reference character 21), the digitizer having an input surface (Fig. 3, reference character 31) defining a display space that is mapped to coincide with the display (col. 3, lines 32-34, and 64-67), and saving the background image and annotation (Fig. 3, reference character 35, col. 3, lines 34-49, and col. 4, lines 5-15. Note that every time new figures or sentences are annotated, or written, or edited, on the transparent digitizer, the frame memory 35 saves this annotations, or corrections, together with the background, or original image).

However, Yoshioka fails to teach that the digitizer is an electromagnetic digitizer. Henderson teaches of an electromagnetic digitizer (col. 2, lines 5-6).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use an electromagnetic digitizer, as taught by Henderson, in the device of Yoshioka because electromagnetic digitizers are well known in the art of digitizers to be used as one type of digitizer among many other alternatives, for example, electrostatic, touch, optical, ultrasonic, etc. (see Henderson, col. 1, line 66-col. 2, line 8).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricardo L. Osorio whose telephone number is (703) 305-2248. The examiner can normally be reached on Mon-Thu from 7:00 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached at 305-4938.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to: (703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Ricardo L. Osorio

Examiner

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RLO

September 15, 2003